

## State Membership Totals

(As of Sept. 30, 2000)

	Adults	Cadets	Total
Alabama	711	184	895
Alaska	1,017	200	1,217
Arkansas	345	201	546
Arizona	847	581	1,428
California	2,142	1,521	3,663
Colorado	1,130	804	1,934
Connecticut	258	316	574
Delaware	235	152	387
Washington D.C.	238	359	597
Florida	2,165	1,848	4,013
Georgia	1,041	702	1,743
Hawaii	314	185	499
Idaho	244	173	417
Illinois	753	634	1,387
Indiana	465	343	808
Iowa	220	127	347
Kansas	252	154	406
Kentucky	412	295	707
Louisiana	525	197	722
Maine	275	197	472
Maryland	672	651	1,323
Massachusetts	599	513	1,112
Michigan	738	456	1,194
Minnesota	717	495	1,212
Mississippi	353	194	547
Missouri	419	465	884
Montana	220	192	412
Nebraska	280	186	466
Nevada	558	268	826
New Hampshire	253	255	508
New Jersey	545	759	1,304
New Mexico	594	216	810
New York	1,319	1,160	2,479
North Carolina	909	384	1,293
North Dakota	168	89	257
Ohio	858	681	1,539
Oklahoma	472	352	824
Oregon	463	278	741
Pennsylvania	1,260	1,078	2,338
Puerto Rico	476	1,526	2,002
Rhode Island	118	127	245
South Carolina	597	606	1,203
South Dakota	214	176	390
Tennessee	766	480	1,246
Texas	1,774	1,259	3,033
Utah	449	223	672
Vermont	203	143	346
Virginia	753	560	1,313
Washington	669	686	1,355
West Virginia	393	200	593
Wisconsin	765	403	1,168
Wyoming	168	117	285
Northeast Region	88	0	88
Middle East Region	54	0	54
Great Lakes Region	29	0	29
Southeast Region	72	0	72
North Central Region	37	0	37
Southwest Region	60	0	60
Rocky Mountain Region	41	1	42
Pacific Region	66	0	66
National Headquarters	2,191	121	2,312
Grand Totals	34,969	24,473	59,442

CIVIL AIR PATROL IS COMMITTED TO PRESENTING THE MOST UP-TO-DATE FORMS OF AEROSPACE EDUCATION FOR CADETS. THE CURRICULUM IS PRESENTED IN A CAPTIVATING AND ENJOYABLE MANNER TO ENCOURAGE THEM TO PURSUE CAREERS IN THE AEROSPACE INDUSTRY AND U.S. MILITARY. SPACE IS CRUCIAL TO THE FUTURE AND NATIONAL SECURITY. WITHOUT DOUBT, MANY OF TODAY'S CADETS WILL PLAY A KEY ROLE IN MAINTAINING THE FREEDOMS THIS COUNTRY HAS ENJOYED FOR MORE THAN 200 YEARS.

## Introducing Civil Air Patrol's New Cadet Aerospace Education Program: Two Books

On Jan. 1, 2001, the Civil Air Patrol will transition to the new cadet aerospace education program. Among the changes are the introduction of two new books, *Aerospace Dimensions* and *Aerospace: The Journey of Flight*. This updated program reflects the changes in CAP's cadet population, of which 53 percent are now ages 10-14. The new program targets the aerospace education curriculum to the appropriate age level of cadets. It is designed to inspire and motivate cadets to become interested in aviation and space and to spark their imaginations. The current Phase I and Phase II text, *Aerospace: The Flight of Discovery* was designed for ninth graders and proved too complex for younger cadets. On the other end of the spectrum, more mature cadets also needed aerospace education materials geared to their age level. The completely revised aerospace education curriculum has a specific program just for them. Senior cadets will use the new materials to help them mentor and instruct the younger cadets.

### For Younger Cadets

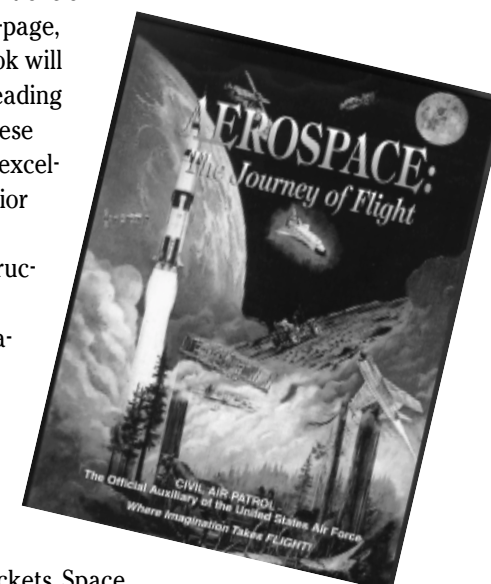
The book, *Aerospace Dimensions*, is designed for Phase I and Phase II cadets. It is not a single textbook, but six separate softbound learning modules. The titles of these six modules are: "Introduction to Flight," "Aircraft Systems and Airports/Airways," "Air Environment," "Rockets," "Space Environment," and "Spacecraft." Each learning module consists of approxi-

mately 35 full-color pages. A cadet can complete each module over a two-month period, and the modules can be accomplished in any order so new cadets can join right in with the other cadets who are already in the program. The modules are supported with student, leader, and resource guides. In addition, each module has learning outcomes and "Test Your Knowledge" questions. Every module includes several fun and exciting hands-on, group-based activities that reinforce learning. All of these activities can be accomplished with readily available and inexpensive materials. For example, the "Introduction to Flight" module explains how to build a model of the famous supersonic SR-71 spy plane using foam pipe insulation and meat trays. It even flies!

### Geared for Senior Cadets

*Aerospace: The Journey of Flight* is also a full-color product and is designed for cadets in Phases III and IV. Portions of this 27-chapter, 640-page, hard-bound textbook will become assigned reading for older cadets. These readings will be an excellent tool to help senior cadets fulfill their mentoring and instructor responsibilities with the younger cadets. The book contains six sections: the History of Air Power, Air Environment, Principles of Flight and Navigation, Rockets, Space and Aerospace Community.

POSITIONED FOR  
THE FUTURE





**MISSION:** GROWING FROM ITS WORLD WAR II EXPERIENCE, THE CIVIL AIR PATROL HAS CONTINUED TO STRIVE TO SAVE LIVES AND ALLEVIATE HUMAN SUFFERING THROUGH A MYRIAD OF EMERGENCY SERVICE AND OPERATIONAL MISSIONS.

*Perhaps best known for its search and rescue efforts, CAP now flies more than 85 percent of all federal inland search missions directed by the Air Force Rescue Coordination Center at Langley Air Force Base, Virginia. Outside the continental United States, CAP supports the Joint Rescue Coordination Centers in Alaska, Hawaii, and Puerto Rico.*

## Search and Rescue

Advances in search and rescue technology over the past few years have remarkably improved the location and recovery of downed airplanes and crash victims. Global positioning satellites, coupled with the increasing reliability of distress beacons, mean downed aircraft can be found and victims rescued with fewer flights in a shorter time.

Civil Air Patrol took that technology further through a comprehensive upgrade of the standards and supporting instructional material for all emergency services specialty areas. This updated curriculum will help standardize CAP emergency services program throughout the nation. It will also integrate CAP fully into the Incident Command System and greatly enhance CAP's credentials to conduct search and rescue and disaster relief operations with federal, state and national organizations.

CAP is also working with Analytical Graphics, a private company, to enable our mission planners to simulate flying over search areas with computer-generated terrain and aircraft. Once complete, the program will further improve CAP's efficiency in SAR operations.

Other improvements include the development of a Web-based system to track the flying time of its aircraft fleet and qualifications of its volunteer pilots. This system will employ wing volunteers who will be responsible for timely

and accurate input of flight hours and pilot qualifications. The system will centralize and automate this information and be maintained at CAP's National Headquarters, and will be accessible to U.S. Air Force staff members.

Operational responses in the year 2000 included: 2,819 missions, 21,085 personnel, 2,086 aircraft, 7,304 flying hours. The result: 77 lives saved.

## Disaster Relief

Though SAR remains a primary focus under CAP's emergency services umbrella, advances in technology have allowed CAP to allocate more of its resources to disaster relief efforts. The Union Pacific train wreck in Eunice, Louisiana, and wildfires throughout the western part of the nation underscored the need for digital aerial video during times of disaster.

Some of the most sought-after photos last spring were provided by CAP flights over the train derailment. At least 20 Union Pacific freight cars jumped the track May 27, causing explosions that rocked the nearby town of Eunice. The outpouring of volatile vapors prevented ground team investigators from reaching the train site, and out of concern for nearby residents, officials evacuated a



three-mile area.

Emergency planners were desperate for accurate pictures. Dick Gremillion, director of Emergency Preparedness in nearby Calcasieu Parish, recommended CAP's digital aerial video services. Over the next three days, CAP's Lake Charles squadron flew seven sorties, making several passes during each sortie. The aircrew transmitted high-resolution, digital images that were downloaded within minutes of when they were taken — while the aircraft was still over the train wreck — to a special Web site that was accessed by emergency management officials.

"CAP's video imaging provided a much-needed perspective of the wreck site," says Gremillion. "For the first three days of this incident, CAP provided the only up-close look at the site, due to the nature of the chemicals and fire, and an inaccessible location to the ground."

"CAP was absolutely critical to our operations and containment — and most important, safety — those first two days," says Steve Barkley, Union Pacific regional vice president of operations. "We studied the videos hour after hour and requested additional reconnaissance into specific areas of the accident, which CAP performed."

In New Mexico, CAP crews provided real-time footage of fires to the Emergency Operations Center. The aerial video images helped emergency managers monitor the progress of

major fires and provided early alert of small fires. The New Mexico Wing volunteers were constantly in the air during the month of May, oftentimes flying state and federal officials to evaluate the damage. The agencies that made specific requests to CAP included the *Air Force Times*, Los Alamos National Labs, New Mexico State Forestry, and New Mexico Environmental Department. The state's disaster mitigation planner also requested CAP to map the Cerro Grande fire. At one point in the mission, CAP was solely responsible for updating the situations maps.

## Communications

CAP operates one of the most extensive communications networks in the nation. Emergency services missions require the ability to communicate just about anywhere at any time and with little or no advance notice. The system CAP established and continues to operate has successfully met those requirements.

However, new-technology radios mandated by the National Telecommunications and Information Administration currently present a challenge to CAP communications. This upgrade will require the replacement of nearly 13,000 radios across the country by 2008. Therefore, without adequate funding to replace the current system before 2008, CAP will be without a communications system capable of supporting its nationwide SAR mission.